

CHAPTER 2

The Thai Bond Market

Business and industrial sectors in Thailand, in the past, have relied heavily on direct credit, particularly direct loan from financial institutions and overdrafts from commercial banks, and funds mobilization from the equity market. As a result, the bond market in Thailand has not been much developed. However, the prospects for the Thai bond market is growing rapidly, especially since the beginning of the 1990's. At the end of 1995, the total size of the bond market was Baht 414.8 billion compared to its size of Baht 213.4 billion in 1990. (Table 2.3)

2.1 The Development of the Thai Bond Market.

There were first numerous issues of bonds in Thailand by the Ministry of Finance for the government in 1933. Since the establishment of the Bank of Thailand was established in 1942, the role of managing the issuing process of bonds was then transferred to this agency.

The Thai Government has been the main issuer of bonds for several decades. Government bonds are usually long-term and used primarily for funding the budget deficit. They are also used as a tool for the monetary policy. State enterprises have also issued long-term bonds to raise funds for investment. Historically, there were a few bonds issued by private firms mostly in the form of short-term promissory notes and bills of exchange which were normally guaranteed by commercial banks.

Eventhough the Bank of Thailand never underwrote government issues, except treasury bills, in practice, the authority held whatever portion which could not be sold. When there were huge budgetary deficits, it was left with a substantial volume of unsold bonds. The government tried to save interest expenses on bonds by keeping interest rates at low levels and forcing financial institutions to purchase bonds by requiring commercial banks to hold government bonds, treasury bills or bonds guaranteed by the government. This was done as a condition for commercial bank when opening new branches. The ratio was first fixed, by the government, at 15% of total deposits in 1970 and then was later raised to the level of 16% in 1978. However, this measure was totally removed in May 1993.

During 1979-1982, the Bank of Thailand tried to solve saling by advertising in media and expanding sales outlets to government related institutions such as the Government Savings Bank, the Bank for Agriculture and Agricultural Cooperatives, and the Communications Authority of Thailand. These measures had helped to increased the sales of government bonds. Commercial banks were untouched by these government measures except for the ratio imposed on them. However, in 1981, the Bank of Thailand asked commercial bank which applied for new branches to purchase government bonds for further sales to the general public. Commercial banks were also encouraged to engage in bond trading activities. This resulted in the emergence of the secondary markets for bond trading at commercial banks and financial institutions. Changes in the features were also made by setting the bond interest rates at the level close to those of one-year fixed deposit of commercial banks and adjusting interest rates of bond issues that had already sold out to that of new bond issues. Another important measure was the exchange of low interest rate bonds from financial institutions with the newly issued high interest rate bonds called exchange bonds.

During 1983-1986, as a result of the bond exchange scheme, financial institutions held a certain volume of bonds in excess because exchange bonds could not be used to maintain the bond holding ratio required by the bank of Thailand. This was a factor which stimulated the emergence of the secondary markets for government bonds because exchange bonds were offered to the public. Private financial institutions also repurchased investment bonds from the general public since the bank of Thailand did not offer the buy-back arrangement for this type of bond before maturity.

Before 1990, the Thai bond market was dominated by government bonds. However, government budget surpluses since 1987 meant a lack of supply of new government issues and the last series of government bonds was issued in 1990. State enterprises are also major players in the bond market. They provide much of the country's infrastructure such as electricity and transportation. Because of the ceiling imposed on off-shore loans and insufficient financial support from government, they need to mobilize funds domestically for investment. The value of state enterprise bonds quintupled from 1990 to 1991 indicating that major debt financing had shifted to state enterprises.

In the private sector, businesses issued debentures before 1990 but these were not popular because of complex laws and lack of investors' understanding. The Civil and Commercial Code prohibited private limited companies from issuing debentures. Only public limited companies and companies listed on the SET were allowed to do so. The number of primary issues by the private sector was quite limited. However, after the enactment of the Securities and Exchange Act in May 1992, private limited companies were allowed to issue debentures. Qualified

companies have since mobilized funds through debentures. Domestic debenture volume quadrupled from 1992 to 1993.

Financial institutions have been the main investors in government bonds since they were required to hold government bonds and state enterprise bonds as a part of their reserve requirements. In addition, banks were required to hold such bonds as a prerequisite to receiving a permit to open new branches. The value of these bonds held for the permission to open new bank branches was set in 1970 at a minimum 15 % of total bank deposits, and was raised to 16 % in 1978. Subsequently, the minimum percentage declined and was abolished in 1993. These regulations, in effect, made financial institutions a captive market for government bonds.

On the other hand, investors in short-term securities issued by the private sector generally have been individuals or corporations with excess liquidity who considered these short-term investments alternative to bank deposits. Until recently, almost all bond transactions occurred in the primary market. Secondary market activities were limited to occasional transactions by financial institutions that held bonds in excess of their reserve requirements.

2.2 Debt Instruments.

The following table shows the types of long-term fixed income securities that are issued in Thailand.

Government agencies and enterprises such as the Electricity Generating Authority of Thailand, the National Housing Authority and the Telephone Organization of Thailand have been active in the long-term bond market. The Bank of Thailand is the sole underwriter of bonds issued by the government,

while securities companies are allowed to underwrite bonds issued by government agencies and enterprises.

Table 2.1 : Money Market and Bond Instruments

Type	Maturity (years)	Issuer
Government bonds	5-10	Central Government
Government agency and enterprise bonds	5-10	Government agencies and State enterprises
Corporate debentures	3-5-7	Public companies, quoted companies and listed companies
Floating rate notes	-	State enterprises, private sector corporations

Source: Bank of Thailand

Government bonds can be classified into accumulated loan bonds, coupon loan bonds and investment bonds. All three issues are transferable and usable as a pledge against borrowing in the repurchase market. Only the accumulated loan bonds and the coupon loan bonds can be redeemed prior to maturity through the bank of Thailand. Investment bonds usually have the longest maturity (10 years) among the three issues. Most trading in government bonds occurs in the outside the stock market, which is not supervised and where no commission is paid.

Bonds issues by government agencies and enterprises have a maturity range from 3 to 10 years. Both government bonds and government agency and enterprise bonds may be sold to commercial banks and finance companies prior to maturity. The issue of corporate debentures is limited to public companies and companies listed on the SET. Currently, four types of debentures are listed at the SET : straight debentures, secured debentures, convertible debentures and secured convertible debentures.

The money market instruments traded in the Thai money market include : treasury bills, negotiable certificates of deposits (NCDs) and commercial bills.

Treasury bills are issued by the Ministry of Finance and are mostly purchased by bank of Thailand and the Exchange Equalization Fund, a government-owned holding a portion of the country's exchange reserves. Treasury bills held by commercial banks fluctuate overtime, depending upon liquidity because treasury bills may be used to meet the legal reserve requirements against deposits.

Table 2.2 : Money Market Instruments

Type	Issuer
Treasury bills	Ministry of Finance
Negotiable certificates of deposits	Commercial banks and finance companies
Commercial bills	Private corporations, foreign banks branches, the Industrial Finance Corporation of Thailand

Source : Bank of Thailand

NCDs are issued by commercial banks and finance companies. Commercial bills include promissory notes, bills of exchange and banker's acceptances. They have been issued by business and industrial firms with high credit standing, foreign banks' branches such as Citibank and some financial institutions, such as the Industrial Finance Corporation of Thailand. For example, the Citinotes and IFCT notes are transferable bills of exchange. The market for commercial bills is still small, but it has been growing rapidly, gaining popularity among institutional investors. The bond repurchase market, using government securities, was established in 1979. This repo market became an important segment of Thailand's money market, benefiting from the reduction of the reserve requirement for branch openings.

As an over the counter (OTC) market, the Thai interbank market has developed among larger commercial banks as the lenders. Smaller banks, foreign bank branches and finance companies have been the borrowers. Interbank loans have short-term maturities. The Thai government approved the establishment of the Bangkok International Banking Facilities (BIBF) in September 1992. Because all commercial banks are allowed to set up offshore banking activities in foreign currencies, the BIBF has had a significant impact on the interbank money market as well as the long-term fixed-income securities market.

Until recently, Thailand's money market has not been expanding. It is relatively small when compared with the size of the banking sector because the Thai government stopped issuing treasury bills since the second half of 1989 in view of government budget surpluses, and the issue of transferable certificates of deposits (TCDs) by commercial banks have drastically declined since 1986.

2.3 Primary Market

Historically, the Thai bond market has been dominated by government issues. As recently as 1990, almost 91 % of the bonds outstanding were government issues, with the remaining being state enterprise issues. Corporate bond issues were severely restricted by the Public Company Law which allowed companies listed on the SET to only issue debt instruments on a restrictive basis and prohibited private, unlisted companies selling bonds to the public. As a result, private companies relied heavily on bank loans and equities for funds. But in 1992, new Public Companies Act and Securities Exchange Act allowed public and private companies, listed and unlisted, to issue bonds. In 1995, the Bank of Thailand started issuing a series of " BOT bond/ Central Bank bill " with varying maturities.

As there have been no new issues and Baht 19,634.4 million were redeemed during 1995, government bonds outstanding declined to Baht 42,888 million from Baht 62,522.4 million at the end of 1994. Declining levels of outstanding government bonds were offset by continued issuance of state enterprise bonds which totaled Baht 55,155 million in 1995 bringing the level at year end to Baht 238,279 million.

Table 2.3 : Issuance and Outstanding Bonds (Baht billion)

Issuer		1990	1991	1992	1993	1994	1995
Government	Issuance	6.0	-	-	-	-	-
	Outstanding	195.2	150.8	133.9	100.7	62.5	42.9
State enterprises	Issuance	6.7	33.3	27.0	60.4	57.1	55.2
	Outstanding	18.2	50.2	76.2	134.9	190.4	238.3
BOT	Issuance	-	-	-	-	-	29.5
	Outstanding	-	-	-	-	-	9.5
Corporation	Issuance	-	-	5.1	21.1	59.8	47.5
	Outstanding	-	-	5.1	26.3	86.1	133.6
Total outstanding		213.4	201.0	215.2	261.9	339.0	414.8

Source : Bank of Thailand

On August 4, 1995, the Bank of Thailand started issuing a series of " BOT bond/Central Bank bill " worth Baht 10,000 million with varying maturities of 1, 3 and 6 months, roll over. This was to drain off excess liquidity during the time of foreign capital inflows and to support the Bank of Thailand's monetary policies. From August through December 1995, issuance of BOT bonds amounted to Baht 29,500 million (32 issues) with the outstanding value as of December 31, 1995 of Baht 9,500 million.

During 1992-1994, Fund mobilization of corporations through domestic bond issuance amounted to Baht 86,055.3 million (63 issues). In 1995, issuance of corporate bonds, discouraged by the aforementioned negative factors, totaled Baht 47,528.9 million, a drop of 20.5 % compared to 1994. 70 % of the total was

issued in the second half of the year. At year end, outstanding corporate bonds amounted to Baht 133,584.2 million (91 issues).

2.4 Secondary Market

Early in 1994, the SEC appointed the Association of Securities Companies (ASCO) to study the establishment of a secondary market for debt instruments. To help stimulate the growth of the secondary bond market, ASCO established a sub-committee, comprising of representatives from SEC, the Bank of Thailand and ASCO's member companies. In September 1994, the Bond Dealers Club (BDC) was founded within the organization structure of ASCO. The Bond Dealers Club members must be financial institutions authorized by SEC to trade or underwrite equity or debt instruments. The debt instruments traded can be either government, state enterprise or corporate bonds with a minimum issue size of 100 million baht, e.g., unsecured debentures, convertible debentures, subordinated debt instruments, commercial papers, floating rate notes, unsecured debenture warrants or asset-backed securities. Currently, debt instruments without a credit rating, offered through private placements, right issues, etc. are also allowed to be traded within the BDC. However, SEC requires sufficient information disclosure on the issues.

BDC's trading system, or " BONDNET ", is a computerized system conducted by a system of " dealerships " and is " quote-driven ". Each dealer has a terminal at his workplace linked to BDC's central terminal. Dealers key in their buy or sell advertisements, which are displayed on each member's screen. Interested parties reply to these advertisements and negotiate with one another anonymously. After the price and volume are agreed upon, the seller will put the transaction through on its screen and the buyer confirms the deal.

Prices quoted in BDC are clean prices, that is, the price excluding accrued interest. There is no commission charged from the trade. Dealers make profits from the spread margin between the bid and offered price.

Trading on the BDC market started on November 1, 1994, with 62 members. Trading hours are from 10 a.m. to 12.30 p.m. hours, Monday through Friday. A transaction settlement is done by Thailand Securities Depository Company, a subsidiary of SET, and occurs two working days after the execution date. In 1995, BDC opened a second round for membership. The number of members increased to 87, consisting of 59 finance and securities firms, 10 securities firms, one finance firm, 10 Thai commercial banks and seven foreign commercial banks. BDC members represent about 89% of those financial institutions with debt instrument trading licenses.

2.4.1 Market Activities in BDC

Trading Activities in BDC

In 1995, due to the unfavourable market conditions, the secondary market experienced sluggish trading throughout the first half of the year with the lowest monthly trading value of Baht 1,106.7 million recorded in April. However, during mid 1995, foreign capital inflows generated by interest rate arbitrage created excess liquidity in the financial system. As the liquidity situation eased, the market responded positively and the monthly trading value reached its peak in June with a trading value of Baht 7,795.47 million.

From the third quarter throughout the remainder of the year, the market was quite stable with monthly trading turnover staying around Baht 4,000-5,000 million. For the whole year, the monthly trading value averaged Baht 4,294 million.

The highest daily trading value of the year was Baht 832.756 million recorded on June 23, 1995.

Table 2.4 : 1995 BDC Monthly Trading Value (Baht million)

Month	Deal		Crossing		Total Trading Value	Daily Average	Average Yield (%)
	Value	%	Value	%			
January	2,345.92	76	744.31	24	3,090.23	147.25	11.86
February	2,607.59	81	613.00	19	3,220.59	169.50	11.97
March	2,782.81	81	715.83	21	3,444.65	149.77	12.02
April	618.87	56	487.81	44	1,106.68	69.17	12.31
May	2,121.08	67	1,022.37	33	3,143.45	157.17	12.25
June	5,847.02	75	1,948.34	25	7,795.37	354.33	11.84
July	3,842.47	77	1,139.65	23	4,982.12	249.10	11.64
August	4,577.88	78	1,269.50	22	5,847.39	265.79	11.64
September	2,882.20	76	924.09	24	3,806.29	190.31	11.81
October	3,112.27	75	1,056.37	25	4,168.65	198.51	11.69
November	2,608.01	46	3,071.17	54	5,679.18	258.14	11.89
December	4,173.58	80	1,070.19	20	5,243.77	275.99	11.87
Total	37,465.73	73	14,062.45	27	51,528.38	209.46	11.84

Source : BDC, unpublished

Debt Securities Trading in BDC

To increase supplies of debt securities trading in the system, the BDC introduced BOT bonds and convertible debentures (Cds) to start trading on October 24, and December 1, respectively. Since BOT bonds are held by financial institutions for their reserve requirements and given the low liquidity for Cds, the

trading volume remained thin. The total trading values of BOT bonds and Cds amounted to Baht 931.2 and Baht 40.1 million respectively.

Table 2.5 : 1995 BDC Trading Value by Rating

Month	A-rated		B-rated		Non-rated		BOT		Total
	Value	%	Value	%	Value	%	value	%	
January	1,594.1	52	748.9	24	747.3	24	-	-	3,090.3
February	1,387.4	43	1,463.6	45	369.9	12	-	-	3,220.6
March	1,354.4	39	1,327.9	39	762.4	22	-	-	3,444.7
April	216.2	20	358.3	32	532.2	48	-	-	1,106.7
May	875.3	28	1,231.6	39	1,036.6	33	-	-	3,143.5
June	3,235.0	41	2,775.3	36	1,785.0	23	-	-	7,795.4
July	1,702.4	34	1,435.2	29	1,844.6	37	-	-	4,982.2
August	2,515.7	43	1,772.1	30	1,559.5	27	-	-	5,847.4
September	2,103.2	55	870.4	23	832.7	22	-	-	3,806.3
October	1,086.1	26	1,069.5	26	1,873.5	45	139.5	3	4,168.6
November	2,247.3	40	1,805.2	32	1,217.4	21	409.2	7	5,679.2
December	2,131.9	41	1,478.6	28	1,250.8	24	382.5	7	5,243.8
Total	20,448.9	40	16,356.5	32	13,791.8	27	931.2	2	51,528.4

Source : BDC, unpublished

As of December 1995, there were 73 issues of corporate debentures (69 debentures and 4 convertible debentures), traded in BDC for a total of Baht 89,227.5 million. Debentures with A-rated (A- to AA+), B-rated (BBB to BBB+) and non-rated accounted for 31% (20 issues), 18% (15 issues) and 42% (38 issues) of the total outstanding value respectively. BOT bonds, of which all

auctioned issues are traded in the system, had the outstanding value of Baht 8,500 million as of December 1995.

Table 2.6 : Debt Securities Trading in BDC in 1995 (Baht million)

Month	No. of issues	Value	Total of issues	Cumulative value
January	4	3,660.0	37	49,040.0
February	-	-	37	49,040.0
March	1	600.0	38	49,640.0
April	10	4,020.0	48	53,660.0
May	2	7,000.0	50	60,660.0
June	1	800.0	51	61,460.0
July	-	72.5*	51	61,387.5
August	2	1,750.0	53	63,137.5
September	7	8,390.0	60	71,527.5
October	3	1,900.0	63	73,427.5
November	5	11,200.0	68	84,627.5
December	5	4,600.0	73	89,227.5

Source : BDC, unpublished

Note : *72,500 units of MK#1 were redeemed before maturity

** excluded BOT bonds

Table 2.7 : Outstanding Value of Debt Securities Traded in BDC as of 1995

Unit: Baht million

Bond	Value	% of value	No. of issues
Corporate debenture	89,227.5	91	73
A-rated group	29,960.0	31	20
B-rated group	17,640.0	18	15
Non-rated group	41,627.5	42	38
BOT bonds	85,000.0	2	14

Source: BDC, unpublished

Table 2.8 : 1995 Top Ten Dealer Firms

Firm	Market share (%)
1.S-ONE	19.8
2.FIN 1	14.8
3.NFS	10.6
4.WALL	7.6
5.DS	5.2
6.TISCO	3.9
7.NPAT	3.6
8.SCB	3.4
9.TFAS	3.2
10.BBL	2.9

Source : BDC, unpublished

Market Share by Dealer Firms

For the whole year, Finance and Securities companies contributed 49 % of total trading values. The trading values of Finance company combined with local banks accounted for 24 %. The total trading values of foreign banks accounted for 3% of the total. Securities companies contributed 24% of total trading values.¹

2.5 The Credit Rating Agency

Credit rating is an essential ingredient in developing bond market since it provides timely and reliable information that helps investors and other market participants make investment decision in bonds.

2.5.1 The Establishment of TRIS

To stimulate development of Thailand's bond market, Thai Rating and Information Services (TRIS) was established by the initiative of the Bank of Thailand. TRIS has an agreement for technical support from Standard and Poor's (S&P), an internationally acclaimed credit rating agency with branches located in financial centers worldwide. TRIS represents Thailand in the ASEAN Forum of Credit Rating Agencies (AFCRA), a regional credit rating association.

TRIS has broad-based support from the Thai business and financial community which forms TRIS's shareholding structure. No single shareholder owns more than 5% of TRIS, ensuring that TRIS is free from any outside interference. TRIS's shareholders comprise four major groups: commercial banks

¹(1) The total trading values include both dealing and crossing values.

(2) BDC members consist of 59 finance and securities companies, 10 securities companies, 11 finance company and Thai commercial banks, 7 foreign commercial banks.

(22%), finance companies (22%), securities companies (22%) and other institutions (34%). Other institutions include life insurance companies, investment management companies, Ministry of Finance, Stock Exchange of Thailand, Asian Development Bank, Government Saving Bank, and Industrial Finance Corporation of Thailand.

TRIS has an eleven-member board of directors that oversees the company's policy. The board panel is made up of five shareholder representative directors, five expert directors, and TRIS's managing director. Dr.Panas Simasathien, former permanent secretary and Minister of Finance chairs the board, and Dr.Vuthiphong Priebjrivat, former vice president and manager of corporate planning department of Bangkok Bank, is managing director.

TRIS provides credit rating services for businesses and specific bonds. TRIS acts as a credit analyst for individual and institutional investors providing investors with a fair and objective assessment of the quality of a bond and the capability of companies to fulfill debt obligations.

As a recently established institution, TRIS does not have the track record of Moody's or S&P, but it has tried to ensure that it has the same competence to offer a similar quality of service. This has been achieved by concentrating on four areas.

1. TRIS has an arrangement for extensive technical support from S&P, and also an agreement for in-depth training. TRIS analysts and managers are regularly trained on the business and analytical sides of the rating business at S&P offices, and S&P sends senior analysts and officials to TRIS quarterly. TRIS has documentation services from S&P and it can consult S&P's New York, Melbourne and Tokyo offices when required.

2. TRIS recruits only personnel of the highest calibre. Typically, TRIS's senior analysts have an MBA in finance and five to eight years experience in banking or investment banking, mostly in credit analysis.

3. TRIS has created the best database possible to ensure that the information for its analyses is thorough and up-to-date. Public information from the stock exchange is pulled and assembled, and the accounting differences between various companies made consistent. TRIS also subscribes to all information centers, magazines, on-line services, and other sources of data that could impact analysis.

4. A unique departure from the approach of Moody's and S&P, TRIS uses a rating committee that has outside members to supplement its in-house team. The committee is made up of members of TRIS and three or four leading businessmen and financial experts who are drawn from a pool of about 15 to 20 people. They include the chairman of the Stock Exchange of Thailand, a former manager of the SET, a former secretary general of the Board of Investment, the president of the Federation of Thai Industries, an executive director of the Thai Chamber of Commerce, a former finance minister, a former commerce minister, and presidents and former presidents of various commercial banks.

This approach compensates not only for the relative newness of TRIS, but also for the unique features of Thai business culture and financial reporting requirements. Although TRIS's analytical work is professional and effective, TRIS considers that it needs to be balanced by the views of these business and financial experts.

Western credit rating agencies are fortunate to have access to the most complete public disclosure regulations in the world. In Thailand, and indeed in the rest of Asia, disclosure is not as comprehensive, and often, information that should be considered may not appear on financial statements or annual reports. Having a panel of highly experienced " wisemen " to provide expertise in the rating process, is most suitable for Thailand and more credible to the local business community.

2.5.2 TRIS's Services

Rating Services

TRIS offers two types of rating services : general company rating and specific issue rating. Company rating assesses the company's overall ability and willingness to service its existing debts in a timely manner. An issue rating focuses on the likelihood of timely payments of interest and principal for a particular issue.

Ratings can be notified in two ways : public and private. After TRIS assigns a rating, companies or issuers can choose to announce the results publicly or keep them private. Many companies use their ratings to promote their projects or bonds. A company not satisfied with its rating can opt to keep the rating private, improve its profile and announce its new rating to the public later.

Credit rating services from TRIS are based on local currency ratings and concentrate on all types of businesses and firms as well as specific bonds. TRIS plans in the future to expand its rating services to include state enterprises and smaller business. TRIS's rating is not a recommendation to buy or sell any issue, but an expression of opinion to advise investors on risks that they might face.

Information Services

TRIS publishes a publication, CreditNews, which serves as an analytical report on the specific company assigned rating by TRIS and already announced to the public. Each issue contains information on the rated company including rating, rationale, company profile, industry profile, business profile and financial statistics. CreditNews also serves as a financial guide aimed at local and international investors and business professionals.

TRIS also set up an on-line information service, TRISLine, to help promote viable investment from foreign funds and to facilitate investment decisions in the Thai bond market. The service includes : economic overviews, rating announcements, prospectus information, current bond prices and yields and TRIS's CreditNews. TRISLine will include industry studies and regulatory tax policies governing the bond market in the near future. TRISLine is provided through international business information vendors such as Bloomberg and Reuters.

2.5.3 Rating Process

TRIS's rating process starts with compiling a client's information. Several company visits and a management meeting are arranged to assess the company's business and financial risks. Ratings are assigned by TRIS's rating committee. Afterwards, TRIS notifies the client of its rating, which can be appealed if the client does not agree with the rating. In the case of an appeal, TRIS will require more information from the client to revise the analysis and assign a new rating or confirm the assigned one. The client cannot appeal this final rating but has the option to withdraw it.

If the client accepts the rating results, he can choose to announce the results to the public or keep them private. If a client wishes to publicly announce

its rating, TRIS contacts local media to release the rating announcement. TRIS guarantees rating results within 30 days with full cooperation from the client on providing adequate information.

TRIS determines a company's credit rating after in-depth analysis of quantitative and qualitative factors. Although TRIS's rating business has two departments, one for financial institutions and one for general corporates, it applies a uniform approach to analysis as outlined in the analytical framework TRIS developed for rating comparisons. To ensure all salient factors are considered, TRIS's analytical framework includes industry, business and financial analyses. Each part utilizes a format that divides the analysis into several key variables. Each variable is weighted according to the nature of the business being rated ; however, there is no set formula for combining these factors to determine a final rating. The overall rating judgement is determined by the " rating committee "

2.5.4 Monitoring Process

After a credit rating has been assigned by the rating committee and accepted by the issuer/company to be announced publicly and published in CreditNews, the monitoring process begins and continues until the bond matures or the company's rating contract expires. During this time, if something happens that may affect the rating, TRIS notifies the public by announcing the following :

CreditAlert announcement : a public warning issued by TRIS when significant events may affect the company's or bond's rating already assigned by TRIS because of changing business conditions. This could include: mergers, new investments, recapitalizations, voter referendums, regulatory actions or anticipated operating developments but with insufficient information to fully assess and

reconsider a bond's current rating. CreditAlert designations may be " positive ", " negative ", or " developing ", depending on the likely impact of a particular situation. The existing rating continues unchanged for the time being.

CreditUpdate announcement : reviews rating of the company or bond already assigned by TRIS. CreditUpdate occurs when there is newly issued bond or if significant events have taken place that may impact its current rating. The update will include supplementary information to the previously published rating. After a review, the rating may be " raised ", " lowered ", or " affirmed ". CreditUpdate may be an extension of CreditAlert when there is sufficient information.

CreditNews announcement : will be issued when there is sufficient information to fully assess and revise the current rating. Therefore, TRIS will announce a " revised CreditNews " announcement to replace its earlier announcement. The revised rating may be " raised ", " lowered " or " affirmed ". CreditNews is published within one year although the rating may stay unchanged.

2.5.5 TRIS's Rating Symbols and Definitions

TRIS uses letter-grade rating symbols for announcing credit rating results for long-term debt. Grades range from AAA, the highest rating, to D, the lowest rating. The definitions are :

AAA	signifies extremely high capacity to pay interest and repay principal on time, and unlikely to be affected by adverse changes in business, economic or other external conditions.
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AA	signifies a very high capacity to pay interest and repay principal on time, but somewhat susceptible to adverse changes in business, economic or other external conditions than the highest rating.
A	signifies a high capacity to pay interest and repay principal on time, but more susceptible to adverse changes in business, economic or other external conditions than the higher ratings.
BBB	demonstrates a relatively high capacity to pay interest and repay principal on time, but can be more vulnerable to adverse changes in business, economic or other external conditions than any of the higher ratings.
BB	indicates an adequate capacity to pay interest and principal on time, but can be significantly affected by adverse changes in business, economic or other external conditions. Creditor protection is lower than provided by higher ratings.
B	indicates currently low capacity to pay interest and repay principal on time and can expect more adverse changes in business, economic or other external conditions. Creditor protection is not likely to improve significantly.
CCC	indicates significant inability to pay interest and repay principal on time and is very dependent on continued favorable business, economic or other external conditions. The degree of expected adverse factors are more severe than in higher rated categories.
CC,C	demonstrates a high probability of default, and typically applies to debt subordinated to senior debt assigned in the CCC category. The probability of default increase with the lower category of rating.
D	Payment is in default. The issuer does not have the capacity to pay interest and repay principal on time.

The rating from AA to CCC may be modified by the addition of a plus (+) or minus (-) sign to show relative standing within a rating category. TRIS does not classify its rating into investment or speculative grades because the local investment community and related regulatory bodies have not specified this preference.

Although using the same rating symbols as employed by international rating agencies, TRIS's ratings are local currency ratings. These ratings reflect the Thai issuers' ability to service their Thai baht debt obligations, excluding the risk of convertibility of those baht payments into foreign currencies.

Therefore, TRIS's ratings are not capped by the (foreign currency) sovereign ceiling of Thailand, in early 1995, rated A by Standard and Poor's or A2 by Moody's to reflect the country's ability to service foreign currency obligations. The credit quality of the Royal Thai Government in baht, as defined by TRIS, is strictly AAA. Because of this, issuers of outstanding credit worthiness are eligible to receive ratings higher than A or A2, and as high as the highest possible rating of AAA.

Table 2.9 : TRIS Ratings (as of April 9, 1996)

Financial Institutions	Debt Instruments		Rating
1.Asia Securities Trading	Senior debt		A
2.Bangkok Bank	Senior debt		AAA
3.Cathay Trust	Senior debt	1000 mb*	BBB
	Sub. debt	700 mb	BBB-
4.Dhana Siam Finance and Securities	Senior debt		AA-
	Sub. debt	2400 mb	A+
5.Finance One	Senior debt		AA-
	Sub. debt	2400 mb+W*	A+
6.General Finance and Securities	Senior debt		BBB+
	Sub. debt	1000 mb+W	BBB
7.Industrial Finance Corporation of Thailand	Senior debt		AAA
8.Kiatnakin Finance and Securities	Senior debt	1200 mb	A
9.National Finance and Securities	Senior debt		AA-
10.Siam City Bank	Senior debt		AA
	Sub. debt	3000 mb	AA-
		1750 mb	AA-
11.Thai Farmers Bank	Senior debt		AAA
	Sub. debt	7500 mb+W	AA+
12.Thai Thamrong Finance	Senior debt		BBB
	Sub. debt	700 mb	BBB-
Non-Financial Corporates	Debt Instruments		Rating
13.Bangkok Dusit Medical Services	Senior debt		BBB+
14.Banpu	Senior debt	1200 mb+W	A
15.GSS Array Technology	Senior debt	1000 mb	BBB
16.International Engineering	Senior debt	1200 mb (C)*	BBB+
17.Italian-Thai Development	Senior debt	3500 mb+W	A
18.Khanom Electricity Generating Co.	Senior debt	7500 mb (S)*	AA+

19.Muramoto Electron (Thailand)	Senior debt	400 mb	BBB+
20.Nation Publishing Group	Senior debt	1000 mb+W	BBB
21.One Holding	Senior debt	1000 mb	BBB+
22.Precious Shipping	Senior debt	2500 mb	BBB
23.Property Perfect	Senior debt	1800 mb	BBB
		1500 mb	BBB
24.Quality Houses	Senior debt	1360 mb+W	BBB-
25.Rayong Electricity Generating Co.	Senior debt	3500 mb (S)	AA+
26.Singer Thailand	Senior debt	300 mb	A-
27.Swedish Motors	Senior debt	720 mb+W	BB+
28.Thai-German Ceramics Industry	Senior debt	2500 mb	BBB
29.Thai Modern Plastic	Senior debt	560 mb	BBB
30.The Pizza	Senior debt		BBB
31.Tipco Asphalt	Senior debt	500 mb	BBB
		1300 mb (C)	BBB
32.United Communication Industry	Senior debt	5000 mb+W	A
State Enterprises		Debt Instrument	
		Rating	
33.Aeronautical Radio of Thailand	Senior debt		AA
34.Electricity Generating Authority of Thailand	Senior debt		AAA
35.Provincial Electricity Authority	Senior debt		AAA

Source : TRIS

Note : * mb = million baht

W = warrants

C = convertible

S = secured

2.6 Regulatory Framework

During the past few years, the rapid progress of the bond market was attributable to the support from the authorities, who introduced regulatory changes to support market development. These changes included financial deregulation, amendment of laws and regulations concerning debt securities trading, and new arrangements such as the establishment of Thai Rating Information Services and the Bond Dealers Club.

1. The Ministry of Finance

In 1995, the Ministry of Finance set up a committee to study the market development on government bonds and state enterprise bonds. The committee consists of representatives from government sector and private sector : The Revenue Department, the Comptroller General Department, SEC, the Bank of Thailand, State enterprise agencies, the Association of Securities Companies (ASCO), the National Institute of Development Organization and the Bond Dealers Club.

The committee's objectives were to implement measures to develop government bonds and state enterprise bonds in both primary market and secondary market. The measures being studied are to set up the Infrastructure Development Fund, allowing government to issue bonds, to be source of fund for state enterprises on their infrastructure projects, to put up standard guidelines for state enterprises in their bond's issuance. To improve the efficiency of clearing and settlement system and to eliminate obstacles for market development. These measures are expected to create benchmark issues for the Thai bond market. Thus, the set up of such committee outlined the authority's strong intention to build up an active and efficient bond market.

2. The Bank of Thailand

The Bank of Thailand has played an important role in the development of the Thai bond market. The measures implemented were not only an attempt to eliminate obstacles, but also to stimulate further development of the market. The Bank of Thailand's notifications to permit finance companies to issue domestic B/Es and commercial banks to be trustees for unsecured debenture have broadened the scope of activities for financial institutions, allowing them to participate more in the debt instruments business. The issuance of BOT bonds was primarily aimed at adjusting liquidity via "open market operation". A secondary objective was to serve as a benchmark for short-term interest rates. It was recognized that there were constraints to the impact of BOT bond issuance in the benchmark rate. First, BOT bonds are used for meeting reserve requirements and therefore have low liquidity which limits its effectiveness as a benchmark rate. In addition, BOT bonds are a short-term instrument, varying from 1 to 6 months, influencing only the short-term. The implementation of new accounting standards applied to financial institutions investing in debt securities requires an active bond market, since these institutions will have to "mark to market" their bond investments at the end of every month using clean prices quoted in the secondary market. The existence of a large number of low-liquidity bonds would discourage investment in these bonds and would make more difficult the implementation of new accounting standards.

3. The Securities and Exchange Commission

The Securities and Exchange Commission was established under the SEC ACT in 1992. The main functions of the SEC are to supervise, and develop the capital market which comprises the SET, the OTC market, and other related organizations. In addition, the Commission oversees and approves the issuance of new types of debt instruments, the establishment of securities-related

organization such as the share depository center, the clearing and the settlement center. The SEC has issued many regulations governing the issuance of unsecured debentures, convertible debentures, warrants, and criteria for the recognition of a credit rating agency etc.

In 1995, SEC has relaxed the investment conditions by the following announcement :

SEC issued a notification stipulating investment ratio as well as types of assets in which mutual fund companies are allowed to invest as assets of a fixed income fund, requested that all bonds trading in BDC be credit-rated, issued a notification requiring that " the Net Capital Rule " apply to securities companies, amended the regulations regarding issuance of debentures for corporations with less than 3 years operations, and resolution to allow finance and securities companies to lead groups applying for fund management licenses.

Relaxation of investment conditions allowed financial institutions more flexibility in investment by increasing the proportion and types of debt securities open to investment. The amendment of regulations regarding qualifications of corporations to issue debentures encouraged issuance of corporate debentures. Moreover, the increase in institutional investors such as fund management companies will enhance market participation.

2.7 Major Constraints Affecting the Development of the Thai Bond Market

This section discusses the problems facing the Thai bond market that pose a challenge to policy makers as to further develop the Thai bond market and to enhance its efficiency to better serve the consumers' needs. The problems and constraints of the Thai bond market can be summarized as follows

Infrastructure Constraints

Lack of infrastructures poses serious constraint. Eventhough the Bond Deals Club was established as an organized secondary market for debt instruments, the lack of an interest rate benchmark is still the crucial problem. In an efficient bond market, a benchmark is available to help price fixed-income securities. The benchmark should generally be a risk-free yield curve based on the yields of government bonds usually across a range of maturities. Currently, the Thai bond market has no such yield curve. The reason for lack of a benchmark is that the Thai bond market has been constrained by artificial terms and conditions that have allowed the government to finance its budget deficit with relative cheap funds. This non competitive environment was created by requiring a captive market of financial institutions to hold government bonds and guaranteed state enterprise bonds to meet reserve requirements. As a result, yields on these securities have been below the market rates. Consequently, it is not possible to use the yields on these bonds to price other bonds. The second reason is that the government budget surplus during the past several years has reduced the number of bonds in circulation. As the value of government bonds outstanding declined, financial institutions holding those would lock them up. The effect is a very inactive and illiquid government bond market.

Legal Constraints

The tax problems such as the differential tax treatment between corporate and individual holder and the double taxation impact of the specific tax are also remaining impediments of the development of debt instruments. At present, the government continue to expedite legal changes necessary for an active bond market. So far, the changes have been in the right direction and many improvements have been achieved. Nevertheless, several legal issues need to be resolved to provide stability to the growth of the bond market.

Human Resource Constraints

Another problem facing the bond market is the shortage of qualified personnel, particularly at the management level. Large banks are experiencing higher turnover rates in management staff while smaller financial institutions are struggling to recruit good quality staff. The shortage of human capital could pose a major constraint on the future development of the Thai bond market.